

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 44598	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/ US 00/ 22424	International filing date (day/month/year) 16/08/2000	(Earliest) Priority Date (day/month/year) 17/08/1999
Applicant THE DOW CHEMICAL COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of **07** sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. **Certain claims were found unsearchable** (See Box I).

3. **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

NONE

None of the figures.

INTERNATIONAL SEARCH REPORT

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1 (in part)-12, 17-22, 26-29, 30 (in part)-34, 37-39, 41 (in part)-52, 57-72, 73 (in part)-78 and 80-83

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1, 17-22, 23-25, 26-28, 30-33, 35, 37-41, 57-69, 73-76 and 80-83

I) The parametric definitions used in claims 1, 30, 41, 69 and 73 introduce unclarity in the claims for the following reasons:

Claims 1, 30, 41, 69 and 73 relate to a compositions or processes defined (inter alia) by reference to the following parameters:

P1: polymer particles having a one millimeter penetration temperature of less than (about) 75 C as determined by thermal mechanical analysis, and/or

P2: polymer particles having an unconfined yield strength of greater than (about) 73 kilograms per square meter.

The use of these parameters in the present context is considered to lead to a lack of clarity within the meaning of PCT Article 6. It is impossible to compare the parameters the applicant has chosen to employ with what is set out in the prior art. The lack of clarity is such as to render a meaningful complete search impossible (see also description, page 5, line 13 to page 6, line 14).

Consequently, the search has been restricted to compositions, resp., processes in which the polymer particles, component (a), are clearly defined by their polymeric make-up, ie., according to claims 2-16, 29, 34, 36, 42-56, 70-72 and 77-79 and to the examples on file.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as IPEA is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

II) Further unclarities:

IIa) Independent claim 1 does not refer to "silicon oil" and therefore dependent claims 23-25 are unclear (PCT Article 6).

IIb) Independent claim 30 does not refer to an "interpolymer" and therefore dependent claim 35 is unclear (PCT Article 6).

IIc) Independent claim 73 does not refer to an "interpolymer" and therefore dependent claim 83 is unclear (PCT Article 6).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210 (Box II.4)

1. Claims: 1 (in part)-12, 17-22, 26-29, 30 (in part)-34,
37-39, 41 (in part)-52, 57-72,
73 (in part)-78 and 80-83

Compositions and processes in which the polymer particles comprise a random interpolymer of a) a vinyl(idene) aromatic monomer, alone or in combination with stearically hindered (cyclo)aliphatic vinyl(idene) monomer and b) ethylene or aliphatic alpha-olefin monomer having from 3-20 carbon atoms

2. Claims: 1 (in part), 13, 14, 30 (in part), 36 (in part),
41 (in part), 53, 54,
73 (in part) and 79 (in part)

Compositions and processes in which the polymer particles comprise a styrenic block copolymer

3. Claims: 1 (in part), 15, 30 (in part), 36 (in part),
41 (in part), 55, 73 (in part) and 79 (in part)

Compositions and processes in which the polymer particles comprise a polyvinyl chloride polymer

4. Claims: 1, 16, 30, 36, 41, 56, 73 and 79 (all in part)

Compositions and processes in which the polymer particles comprise a propylene (co)polymer

5. Claims: 1, 16, 30, 36, 41, 56, 73 and 79 (all in part)

Compositions and processes in which the polymer particles comprise ethylene-alpha-olefin copolymer

6. Claims: 1, 16, 30, 36, 41, 56, 73 and 79 (all in part)

Compositions and processes in which the polymer particles comprise ethylene-vinylacetate copolymer

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/22424

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C08K9/08 C08J3/12 C08L25/08 C08L23/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 C08K C08J C08L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>WO 98 10015 A (BROOS RENE ;PARK CHUNG P (DE); DOW CHEMICAL CO (GB); THOEN JOHAN () 12 March 1998 (1998-03-12)</p> <p>page 37, line 28 - line 36 ---</p> <p>WO 99 36472 A (KAO CHE I ;CHEUNG YUNWA W (US); CHUM PAK WING S (US); DOW CHEMICAL) 22 July 1999 (1999-07-22) table 2 --- -/-</p>	1-12, 17-22, 26-34, 37-39, 41-52, 57-78, 80-83
X		41-52, 57-78, 80-83

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
8 December 2000	02.07.01
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer DE LOS ARCOS, E

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/22424

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 99 46435 A (STEWART KENNETH B ;DOW CHEMICAL CO (US); TURLEY ROBERT R (US)) 16 September 1999 (1999-09-16) page 71, line 18-21 ----	1-12, 17-22, 26-34, 37-39, 41-52, 57-78, 80-83
P,X	WO 99 46327 A (STEWART KENNETH B ;CHEUNG YUNWA W (US); DIEHL CHARLES F (US); DOW) 16 September 1999 (1999-09-16) page 92, line 3-8 -----	1-12, 17-22, 26-34, 37-39, 41-52, 57-78, 80-83

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/22424

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
WO 9810015	A 12-03-1998	AU 712414 B AU 3727297 A AU 4179897 A BR 9712009 A CN 1233265 A CN 1233308 A EP 0927288 A EP 0923617 A HU 9903926 A NO 991052 A PL 332082 A TR 9901018 T WO 9810160 A US 6184294 B ZA 9707911 A ZA 9707913 A		04-11-1999 26-03-1998 26-03-1998 18-01-2000 27-10-1999 27-10-1999 07-07-1999 23-06-1999 28-03-2000 03-05-1999 30-08-1999 21-07-1999 12-03-1998 06-02-2001 03-03-1999 03-03-1999
WO 9936472	A 22-07-1999	AU 2115999 A BR 9908363 A CN 1288479 T EP 1047727 A NO 20003594 A US 6201067 B		02-08-1999 28-11-2000 21-03-2001 02-11-2000 14-08-2000 13-03-2001
WO 9946435	A 16-09-1999	AU 2997999 A CN 1298459 T EP 1068377 A NO 20004500 A US 6190768 B		27-09-1999 06-06-2001 17-01-2001 31-10-2000 20-02-2001
WO 9946327	A 16-09-1999	AU 3077999 A CN 1299395 T EP 1062273 A NO 20004499 A US 6156842 A		27-09-1999 13-06-2001 27-12-2000 08-11-2000 05-12-2000

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70) 13

Applicant's or agent's file reference 44598	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/22424	International filing date (day/month/year) 16/08/2000	Priority date (day/month/year) 17/08/1999
International Patent Classification (IPC) or national classification and IPC C08L25/00		
Applicant THE DOW CHEMICAL COMPANY		

<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input checked="" type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 07/03/2001	Date of completion of this report 14.11.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer DE LOS ARCOS, E Telephone No. +31 70 340 3573



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/22424

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):
Description, pages:

1-29 as originally filed

Claims, No.:

1-83 as originally filed

Drawings, sheets:

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/22424

the drawings, sheets:

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):
(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

the entire international application.

claims Nos. 1, 13-26, 30-33, 35-41, 53-69 73-76 and 79-83.

because:

the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

no international search report has been established for the said claims Nos. 1, 13-26, 30-33, 35-41, 53-69 73-76 and 79-83.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

the written form has not been furnished or does not comply with the standard.

the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

**INTERNATIONAL PRELIMINARY
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International application No. PCT/US00/22424

Novelty (N)	Yes: Claims
	No: Claims 2-12,27-29,34,42-52,70-72,77,78
Inventive step (IS)	Yes: Claims
	No: Claims 2-12,27-29,34,42-52,70-72,77,78
Industrial applicability (IA)	Yes: Claims 2-12,27-29,34,42-52,70-72,77,78
	No: Claims

**2. Citations and explanations
see separate sheet**

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/22424

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claims 1, 17-28, 30-33, 35, 37-41, 57-69, 73-76 and 80-83 have not been the subject of an International Search Report because of lack of clarity (Art. 6 PCT).

Claims 13-16, 23-25, 35, 36, 40, 53-56 and 79 have not been the subject of an International Search Report because of lack of unity of invention (Rule 13 PCT).

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: WO-A-9810015

D2: WO-A-9936472

2. The present application does not meet the requirements of Article 33(2) PCT because the subject-matter of claims 2-12, 27-29, 34, 42-52, 70-72, 77 and 78 is not novel.

2.1 Document D1 discloses (see page 37, lines 28-35) compositions and processes in which the polymer particles comprise a substantially random interpolymer, talc and a binding agent, which are indistinguishable from the claimed compositions/processes.

2.2 Document D2 discloses compositions comprising talc and a substantially random interpolymer and processes thereof (see Table 2), which are indistinguishable from the claimed compositions/processes.

It follows that the subject-matter of claims 2-12, 27-29, 34, 42-52, 70-72, 77 and 78 is not novel in view of D1 and D2 (Art 33(2) PCT).

3. Being not novel, the subject-matter of claims 2-12, 27-29, 34, 42-52, 70-72, 77

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/22424

and 78 cannot be considered as inventive (Art 33(3) PCT).

Re Item VI

Certain published documents (Rule 70.10)

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO-A-99/46327	16.06.1999	10.03.1999	11.03.1998
WO-A-99/46435	16.09.1999	10.03.1999	11.03.1998

Re Item VII

Certain defects in the international application

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 February 2001 (22.02.2001)

PCT

(10) International Publication Number
WO 01/12716 A2

(51) International Patent Classification⁷: **C08L 25/00**

(21) International Application Number: **PCT/US00/22424**

(22) International Filing Date: 16 August 2000 (16.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/375,856 17 August 1999 (17.08.1999) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US 09/375,856 (CIP)
Filed on 17 August 1999 (17.08.1999)

(71) Applicant (for all designated States except US): **THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US)**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MCMICHAEL, James, W. [US/US]; 426 Southern Oaks Drive, Lake Jackson, TX 77566 (US). MONTANYE, Jeffrey, R. [US/US]; 55 Michelia Court, Lake Jackson, TX 77566 (US). BUNGE, Friedhelm [DE/DE]; Am Bienenbuckel 15, D-77855 Achern (DE). DHODAPKAR, Shrikant, V. [IN/US]; 112 Scarlet Oak, Lake Jackson, TX 77566 (US).**

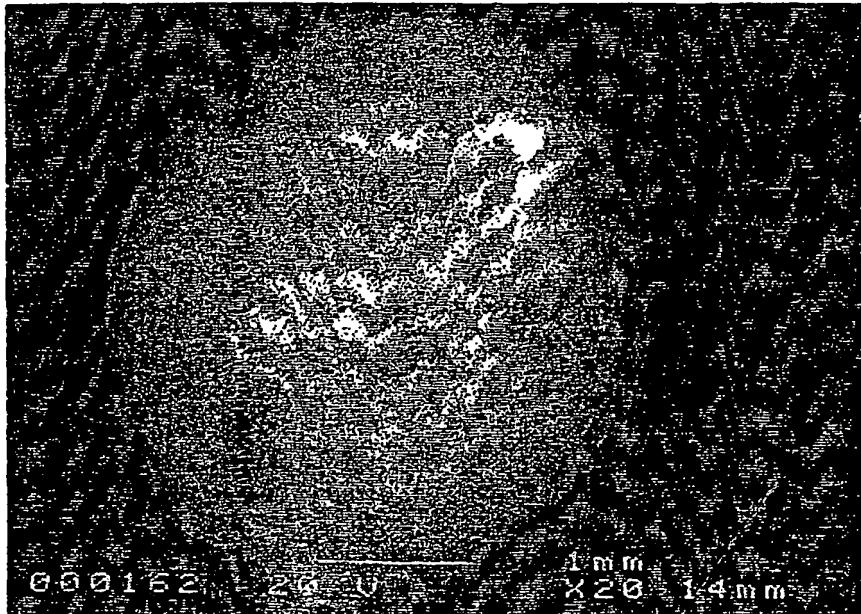
(74) Agent: **KRUPP, Stephen, P.; Intellectual Property, B-1211, 2301 Brazosport Boulevard, Freeport, TX 77541 (US).**

(81) Designated States (national): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW.**

(84) Designated States (regional): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian**

[Continued on next page]

(54) Title: **FREE-FLOWING POLYMER COMPOSITION**



WO 01/12716 A2

(57) Abstract: The present invention relates to substantially free-flowing polymer particles. The polymer particles are those which have a one millimeter penetration temperature of less than about 75 °C as determined by thermal mechanical analysis or an unconfined yield strength of greater than about 15 pounds per square foot (73 kilograms per square meter). The composition also comprises an effective amount of an anti-blocking agent in the presence or absence of a binding agent.



patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *Without international search report and to be republished upon receipt of that report.*

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
22 February 2001 (22.02.2001)

PCT.

(10) International Publication Number
WO 01/12716 A3

(51) International Patent Classification⁷: **C08K 9/08.**
C08J 3/12, C08L 25/08, 23/08

(21) International Application Number: **PCT/US00/22424**

(22) International Filing Date: 16 August 2000 (16.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/375.856 17 August 1999 (17.08.1999) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 09/375.856 (CIP)
Filed on 17 August 1999 (17.08.1999)

(71) Applicant (for all designated States except US): **THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MCMICHAEL, James, W. [US/US]; 426 Southern Oaks Drive, Lake Jackson, TX 77566 (US). MONTANYE, Jeffrey, R. [US/US]; 55 Michelia Court, Lake Jackson, TX 77566 (US). BUNGE, Friedhelm [DE/DE]; Am Bienenbuckel 15, D-77855 Achern (DE). DHODAPKAR, Shrikant, V. [IN/US]; 112 Scarlet Oak, Lake Jackson, TX 77566 (US).**

(74) Agent: **KRUPP, Stephen, P.**: The Dow Chemical Company, Intellectual Property Section, 2301 Brazosport Blvd., Freeport, TX 77566 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
21 February 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 01/12716 A3

(54) Title: FREE-FLOWING POLYMER COMPOSITION

(57) Abstract: The present invention relates to substantially free-flowing polymer particles. The polymer particles are those which have a one millimeter penetration temperature of less than about 75 °C as determined by thermal mechanical analysis or an unconfined yield strength of greater than about 15 pounds per square foot (73 kilograms per square meter). The composition also comprises an effective amount of an anti-blocking agent in the presence or absence of a binding agent.